AMENDED CLAIMS

[Received by the International Bureau on the 18 March 2005 (18.03.05) ;
Original claims 11-17 replaced by amended claims 11-17 (2 pages)]

11. A recombinant DNA sequence for use in securing expression in a prokaryotic or eukaryotic host cell of a polypeptide product having the primary structural conformation of a first subdomain of a reporter protein or a complementary second subdomain of a reporter protein, wherein detectable activity of said reporter protein is restored, when said first subdomain and said complementary second subdomain are brought into close proximity, and wherein said first and said complementary second subdomain are not subdomains of one of the group of proteins consisting of transcriptional activators, ubiquitin, dihydrofolate reductase, β-lactamase, green fluorescent protein, β-galactosidase, inteins, cAMP cyclase, glycinamide ribonucleotide transformylase, aminoglycoside phosphotransferase, hygromycin B phosphotransferase, luciferase.

12. A recombinant DNA sequence according to claim 11, wherein said DNA sequence encodes for a subdomain of a $(\beta/\alpha)_8$-barrel enzyme.

13. A recombinant DNA sequence according to one of claims 11 to 12, wherein said DNA sequence is selected from the group consisting of:

(a) the DNA sequences SEQ ID NO 3, 5, 7, 9, 11, 13, 15, 17 or their complementary strands;

(b) DNA sequences which hybridize under stringent conditions to the protein coding regions of the DNA sequences defined in (a) or fragments thereof;

(c) DNA sequences which, but for the degeneracy of the genetic code, would hybridize to the DNA sequences defined in (a) or (b) and which sequences code for a polypeptide having the same amino acid sequence.

14. A recombinant DNA sequence according to one of claims 11 to 13, wherein said DNA sequence is for use in securing expression in a prokaryotic or eukaryotic host cell of a polypeptide fusion product.

15. A first subdomain of a reporter protein and/or a complementary second subdomain of a reporter protein, wherein detectable activity of said reporter protein is restored, when said first subdomain and said complementary second subdomain are brought into close proximity, and wherein said first and said complementary second subdomain are not subdomains of one of the group of proteins consisting of transcriptional activators, ubiquitin, dihydrofolate reductase, β-lactamase, green fluorescent protein, β-galactosidase, inteins, cAMP cyclase, glycinamide ribonucleotide transformylase, aminoglycoside phosphotransferase, hygromycin B phosphotransferase, luciferase.

16. A first subdomain of a reporter protein or a complementary second subdomain of a reporter protein according to claim 15, wherein the site of fragmentation of said reporter protein into a first subdomain and a complementary second subdomain is identified by a method according to one of claims 1 to 10.

17. A first subdomain of a reporter protein or a complementary second subdomain of a reporter protein according to one of claims 15 to 16, produced by a method of culturing a host transformed with a recombinant DNA molecule selected from the group consisting of the DNA molecules of claims 11 to 14, wherein said molecules further comprises an expression control sequence, said expression control sequence being operatively linked to said molecule.